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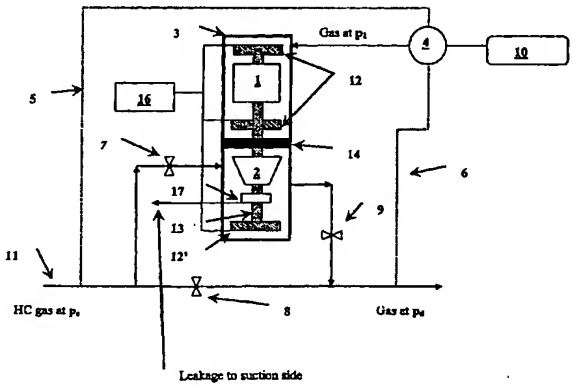
(54) Title: SUBSEA COMPRESSOR MODULE AND A METHOD FOR CONTROLLING THE PRESSURE IN SUCH A SUBSEA COMPRESSOR MODULE




(57) Abstract: A subsea gas compressor module having a housing comprising a sealing element (14) generally defining within said pressure housing at first compartment holding as compressor (2) and a second compartment holding an electric motor (1), said compressor and motor being driveably connected by at least one shaft (13). The first compartment is connected to an inlet line (11) and an outlet line for sealing hydro carbon gas and for discharging gas. The second compartment comprises magnetic bearings (12) for supporting said at least one shaft, and a pressure and volume regulator io is fluidly connected to said second department and a gas supply (5; 11) of gas, and comprises means for sense in respective pressures in the inlet and outlet lines were by, based on a magnitude of said sense pressure, the pressure and volume regulator controls the pressure at which gas is injected into said second compartment. The subsea gas compressor module is for ever characterised in that at least one shaft is supported by is magnetic bearings controlled by control unit (16), where the bearings and control unit are placed in at least one pressure housing comprising a fluid having a controlled pressure, whereby said bearing and control unit are protected from the ingress of the sea water.

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